

CLAIMS

1. Method to calibrate and/or regulate a mixing valve, in particular in a cooling circuit of an internal combustion engine, with which a volume flow can be separated into two partial flows as a function of controlled quantity, whereby the separating ratio of the mixing valve or the mixing ratio is determined by comparing a target quantity with an actual measured quantity, characterized in that a correction value that is computed during operation is taken into consideration in calculating the separating ratio or mixing ratio (MR).
2. Method according to Claim 1, characterized in that a real mixing ratio (MR_{real}) is computed to calculate the correction value and is compared with the prescribed mixing ratio (MR_{target}).
3. Method according to Claim 1 or 2, characterized in that the correction value is formed from an output quantity of a superimposed control unit (34).
4. Method according to Claim 3, characterized in that the superimposed control unit (34) is an integral control unit.
5. Method according to one of Claims 1 through 4, characterized in that additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through a heat exchanger (16), are taken into consideration in forming the correction value.
6. Method according to one of Claims 1 through 5, characterized in that a plurality of correction values is stored in a correction characteristic curve.
7. Method according to one of Claims 1 through 6, characterized in that the correction values or the correction characteristic curves are stored in a characteristic diagram.

8. Method according to one of the preceding claims, characterized in that the mixing valve (12) is permanently calibrated by means of taking the correction values into consideration.
- 5 9. Regulating device to regulate and/or calibrate a mixing valve, in particular in a cooling circuit of an internal combustion engine, with which a volume flow can be separated into two partial flows as a function of controlled quantity, whereby the separating ratio of the mixing valve can be determined by comparing a target quantity with an actual measured quantity, characterized in
10 that a correction value that is computed during operation can be taken into consideration in calculating the separating ratio.
10. Regulating device according to Claim 9, characterized in that the correction value can be derived from a calculation of a real mixing ratio (MR_{real}) and a
15 comparison with the prescribed mixing ratio (MR_{target}).
11. Regulating device according to Claims 9 or 10, characterized in that the correction value can be derived from an output quantity of a superimposed control unit (34).
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12. Regulating device according to Claim 11, characterized in that the superimposed control unit (34) is an integral control unit.
13. Regulating device according to one of Claims 9 through 12, characterized in
25 that the correction value is formed from additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through a heat exchanger (16).
14. Regulating device according to one of Claims 9 through 13, characterized in
30 that a plurality of correction values are stored in a correction characteristic curve.

15. Regulating device according to one of Claims 9 through 14, characterized in that a plurality of correction values or a plurality of correction characteristic curves are stored in a characteristic diagram.
- 5 16. Regulating device according to one of Claims 9 through 15, characterized in that the mixing valve (12) can be permanently calibrated by means of taking the correction values into consideration.